

PATENT

Attorney Docket No. A-59709-3/JAS
Client Ref. SEA 2294.2

through the magnet.

Remarks

This Amendment is submitted in response to the office action mailed December 18, 2002. Reconsideration and allowance of the claims is requested. In this office action, the Examiner first rejects claim 8 and only claim 8 as obvious over either the patent to Tsukuda or Soeda taken with Littwin. These rejections are respectfully traversed.

The Examiner takes the position that as to claim 8, a 'means & function' claim, the teachings of the references are not "excluded by any explicit definition provided in the specification". However, this is not the standard adopted by the CAFC, or any other court. Rather, means plus function claims, according to the standards published in the Manual of Patent Examining Procedure, are to be interpreted only to cover those embodiments which appear in the specification, and in substantial variations thereof.

Thus, in the present application, the art cited by the Examiner, is inherently excluded from coverage by claim 8. The embodiments shown in the reference are not shown in the specification, and they do not constitute insubstantial variations of the teachings of the specification. Thus, they cannot teach the claimed invention. Further, all embodiments covered by the claim teach a back iron without any conductors embedded therein, as shown on the cited patent. Further, the correct definition of back iron, as taught herein, is a passive element, without conductors therein. Finally the other claims pending in this application all expressly exclude the presence of conductors in the back iron to avoid the expense and complexity associated therewith. Therefore, reconsideration and allowance of this claim is requested.

The remaining claims 6, 7, 9 and 10 are rejected as anticipated by Prochazka, U.S. 5,557,248. This rejection is also respectfully traversed. All the claims rejected, clearly recite magnetizer comprises a back iron circumscribing a circular insulative inner core, the insulated inner core comprising pluralities of wire pairs. In the cited reference, both the inner and outer members of the magnetizer comprise sets of wire windings spaced around Serial No.: 09/631,438

PATENT

Attorney Docket No. A-59709-3/JAS
Client Ref. SEA 2294.2

the circumference of the inner and outer members respectively. The patent only contemplates such a design, and does not allow for any variations such as described and claimed herein where only the wire pairs appear in the inner core. Further, the back iron which surrounds the inner core by definition excludes having wires therein; however, to further clarify the issue, the claims are altered to state that there are no wires in the back iron, although, as is already stated, a back iron by definition is a passive element eliminating the possibility of incorporating the wires for charging the magnet.

The claimed design is substantially different than that taught in the reference, and fulfills many of the necessary elements required for a successful design in being substantially less expensive to build and to use while producing equally advantageous results. Reconsideration and allowance of the claims is respectfully requested.

If any matters can be handled by telephone, Applicant requests that the Examiner telephone Applicant's attorney at the number below.

The Commissioner is authorized to charge any additional fees to Deposit Account No. 20-0782 (Order No. A-59709-3/80322942JAS).

Respectfully submitted,

By: 
James A. Sheridan, Reg. No. 25,435

MOSER, PATTERSON & SHERIDAN, LLP
350 Cambridge Avenue, Suite 250
Palo Alto, California 94306
Telephone: (650) 330-2310
Facsimile: (650) 330-2314

Serial No.: 09/631,438

PATENT

Attorney Docket No. A-59709-3/JAS
Client Ref. SEA 2294.2Version With Markings to Show ChangesIn the Claims:

(Changed) 6. A magnetizer for magnetizing a circular magnet with a null zone intermediate alternating poles comprising a circular insulating core supporting pairs of closely spaced axially directed wires, each pair of wires adapted to carry current in the same axial direction, and a back iron having no current carrying wires therein radially spaced from said circular core by a sufficient radial gap to allow said circular magnet to be magnetized to slip into said radial gap, the flux being shaped to create alternating magnetic poles separated by a null zone around said circular magnet, the magnetic flux being shaped by said back iron to return through the magnet to said core.

(Changed) 7. A magnetizer as claimed in Claim 6 wherein said radial gap is of sufficient radial extent that a portion of said radial gap remains open when said circular magnet is inserted so that said null zone of said magnet includes a softened transition zone at either end.

(Unchanged) 8. A magnetizer for magnetizing a magnet with null zones intermediate alternating poles comprising
means for supporting said magnet in said magnetizer and
conductive means for creating a flux path through said magnet which establishes said null zones in said magnet."

(Unchanged) 9. A magnetizer as claimed in claim 6, adjacent pairs of wires carrying current in opposite directions.

Serial No.: 09/631,438

PATENT

Attorney Docket No. A-59709-3/JAS
Client Ref. SEA 2294.2

(New) 10. A magnetizer for magnetizing a circular magnet with a null zone intermediate alternating poles, the magnetizer comprising a back iron having no wires therein circumscribing a circular insulative inner core, the magnetizer further comprising a plurality of wire pairs axially disposed in the circular insulative inner core, each wire pair located close together, current flowing through the paired wires creating flux fields around each said wire pair thereby establishing a magnetic field between the inner core and the back iron to magnetize a magnet disposed between an inner circumference of the back iron and an outer circumference of the inner core, the null transition zones being formed in the regions of the magnet between the wire pairs where the flux is passing through the back iron and there is little flux field from the paired wires passing through the magnet.

Serial No.: 09/631,438